

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
12 May 2005 (12.05.2005)

PCT

(10) International Publication Number
WO 2005/041872 A3

(51) International Patent Classification⁷: A61K 31/421,
31/426, 31/557

(21) International Application Number:
PCT/US2004/035065

(22) International Filing Date: 22 October 2004 (22.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/513,372 22 October 2003 (22.10.2003) US
60/553,657 16 March 2004 (16.03.2004) US
60/567,397 30 April 2004 (30.04.2004) US

(71) Applicant (for all designated States except US): UNIVER-
SITY OF ROCHESTER [US/US]; 518 Hylan Building,
Rochester, NY 14627 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): PHIPPS, Richard,
P. [US/US]; 26 Greylock Ridge, Pittsford, NY 14534 (US).
SIME, Patricia, J. [US/US]; 26 Greylock Ridge, Pittsford,
NY 14534 (US). BLUMBERG, Neil [US/US]; 4 Hidden
Springs Drive, Pittsford, NY 14534 (US).

(74) Agents: MERKEL, Edwin, V. et al.; Nixon Peabody LLP,
Clinton Square, P.O. Box 31051, Rochester, NY 14603-
1051 (US).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

(88) Date of publication of the international search report:
12 January 2006

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: USE OF PEROXISOME PROLIFERATOR-ACTIVATED RECEPTOR GAMMA (PPAR γ) AND/OR RETINOIC ACID
RECEPTOR (RXR) AGONISTS TO INHIBIT PLATELET FUNCTIONS

(57) Abstract: Methods of inhibiting mammalian platelet release of CD40 ligand, thromboxanes, or prostaglandin E2, or surface expression of CD40 ligand that involve contacting mammalian platelets with an effective amount of a PPAR γ agonist, an RXR agonist, or a combination thereof. As a consequence of inhibiting CD40 ligand and thromboxane release, the present invention allows for inhibition of thrombus formation by (or clotting activities of) activated platelets, as well as treating or preventing CD40 ligand-mediated conditions and/or thromboxane-mediated conditions. Use of PPAR γ agonist, RXR agonist, and/or inducers of PPAR γ agonist in preparing a stored blood product, and for diagnostic testing of patient samples is also disclosed.

WO 2005/041872 A3